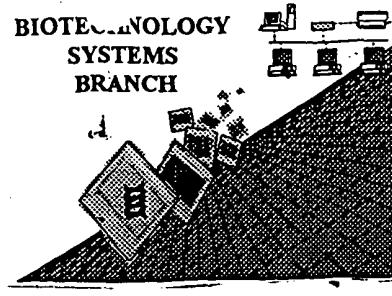


RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/998,551
Source: O1PE
Date Processed by STIC: 12/10/01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED **SUGGESTED CORRECTION** **SERIAL NUMBER:** 091998,551

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleic
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use **space characters**, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for **Artificial or Unknown sequences**.
- 7 Skipped Sequences
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/998,551

DATE: 12/10/2001
TIME: 16:34:40

Input Set : A:\09820155.ST25.txt
Output Set: N:\CRF3\12102001\I998551.raw

3 <110> APPLICANT: Nelson, Bryce P
4 Liles, Mark R
5 Frederick, Kendra
6 Corn, Robert M
7 Robert, Goodman M
9 <120> TITLE OF INVENTION: Label-Free Detection of Nucleic Acids Via Surface Plasmon Resonance

11 <130> FILE REFERENCE: 09820.155
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/998,551

C--> 14 <141> CURRENT FILING DATE: 2001-11-29

16 <150> PRIOR APPLICATION NUMBER: 09/456,038
17 <151> PRIOR FILING DATE: 1999-12-03

19 <150> PRIOR APPLICATION NUMBER: 09/368,991

20 <151> PRIOR FILING DATE: 1999-08-05

22 <150> PRIOR APPLICATION NUMBER: 60/132,342

23 <151> PRIOR FILING DATE: 1999-05-04

25 <160> NUMBER OF SEQ ID NOS: 14

27 <170> SOFTWARE: PatentIn version 3.1

29 <210> SEQ ID NO: 1

30 <211> LENGTH: 20

31 <212> TYPE: DNA

32 <213> ORGANISM: Synthetic oligonucleotide

34 <220> FEATURE:

35 <221> NAME/KEY: misc_feature

36 <222> LOCATION: (12)..(12)

37 <223> OTHER INFORMATION: n is A or C

40 <400> SEQUENCE: 1

W--> 41 agagtttgat cntggctcag

20

44 <210> SEQ ID NO: 2

45 <211> LENGTH: 19

46 <212> TYPE: DNA

47 <213> ORGANISM: Synthetic oligonucleotide

49 <220> FEATURE:

50 <221> NAME/KEY: misc_feature

51 <222> LOCATION: (3)..(3)

52 <223> OTHER INFORMATION: n is G or T

55 <220> FEATURE:

56 <221> NAME/KEY: misc_feature

57 <222> LOCATION: (3)..(3)

58 <223> OTHER INFORMATION: n is C or T

61 <400> SEQUENCE: 2

W--> 62 ggntaacctt g ttacgactt

19

65 <210> SEQ ID NO: 3

66 <211> LENGTH: 20

67 <212> TYPE: DNA

68 <213> ORGANISM: Synthetic oligonucleotide

70 <400> SEQUENCE: 3

71 gtccccctct ttggcttgc

20

Does Not Comply
Corrected Diskette Needed

Same errors on pp 1-3

- invalid response, see error summary
sheet item 10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/998,551

DATE: 12/10/2001
TIME: 16:34:40

Input Set : A:\09820155.ST25.txt
Output Set: N:\CRF3\12102001\I998551.raw

74 <210> SEQ ID NO: 4
75 <211> LENGTH: 16
76 <212> TYPE: DNA
77 <213> ORGANISM: Synthetic oligonucleotide
79 <400> SEQUENCE: 4 16
80 ctccccgctg aaagta
83 <210> SEQ ID NO: 5
84 <211> LENGTH: 15
85 <212> TYPE: DNA
86 <213> ORGANISM: Synthetic oligonucleotide
88 <400> SEQUENCE: 5 15
89 cggtgcttct tctgc
92 <210> SEQ ID NO: 6
93 <211> LENGTH: 21
94 <212> TYPE: DNA
95 <213> ORGANISM: Synthetic oligonucleotide
97 <400> SEQUENCE: 6 21
98 cttttatgtt tgaaccatgc g
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 16
103 <212> TYPE: DNA
104 <213> ORGANISM: Synthetic oligonucleotide
106 <400> SEQUENCE: 7 16
107 ttccctaaca acagag
110 <210> SEQ ID NO: 8
111 <211> LENGTH: 16
112 <212> TYPE: DNA
113 <213> ORGANISM: Synthetic oligonucleotide
115 <400> SEQUENCE: 8 16
116 cgtggcttc tggta
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 17
121 <212> TYPE: DNA
122 <213> ORGANISM: Synthetic oligonucleotide
124 <400> SEQUENCE: 9 17
125 actgctgcct cccgtag
128 <210> SEQ ID NO: 10
129 <211> LENGTH: 24
130 <212> TYPE: DNA
131 <213> ORGANISM: Synthetic oligonucleotide
133 <400> SEQUENCE: 10 24
134 ggatgtgtgt ggagtgttag aaag
137 <210> SEQ ID NO: 11
138 <211> LENGTH: 18
139 <212> TYPE: DNA
140 <213> ORGANISM: Synthetic oligonucleotide
142 <400> SEQUENCE: 11 18
143 gccgaaggcca ccttttat
146 <210> SEQ ID NO: 12

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/998,551

DATE: 12/10/2001
TIME: 16:34:40

Input Set : A:\09820155.ST25.txt
Output Set: N:\CRF3\12102001\I998551.raw

147 <211> LENGTH: 18
148 <212> TYPE: DNA
149 <213> ORGANISM: Synthetic oligonucleotide
151 <400> SEQUENCE: 12
152 ataaaaggtg gcttcggc 18
155 <210> SEQ ID NO: 13
156 <211> LENGTH: 18
157 <212> TYPE: DNA
158 <213> ORGANISM: Synthetic oligonucleotide
160 <400> SEQUENCE: 13
161 gccagcttat tcaactag 18
164 <210> SEQ ID NO: 14
165 <211> LENGTH: 18
166 <212> TYPE: DNA
167 <213> ORGANISM: Synthetic oligonucleotide
169 <400> SEQUENCE: 14
170 ctagttgaat aagctggc 18

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/998,551

DATE: 12/10/2001

TIME: 16:34:41

Input Set : A:\09820155.ST25.txt

Output Set: N:\CRF3\12102001\I998551.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:41 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1

L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2